

Slide valves

Types 3100/3105

Slide valves Type 3100 (normally closed) and 3105 (normally open) are pilot-operated, three port, two position valves with a spring-return action. The pilot operator of each valve is capable of withstanding high pressures equal to the main line pressure. This enables the valves to be used locally as actuators, as quick dump valves. The valves are sealed to withstand external body pressure making them suitable for subsea applications. Manifold mounted versions are also available.

A major feature of the valve design is elimination of the continuous leakage which is characteristic of conventional lapped-face spool valves. The valve incorporates special high pressure seals which prevent leakage.

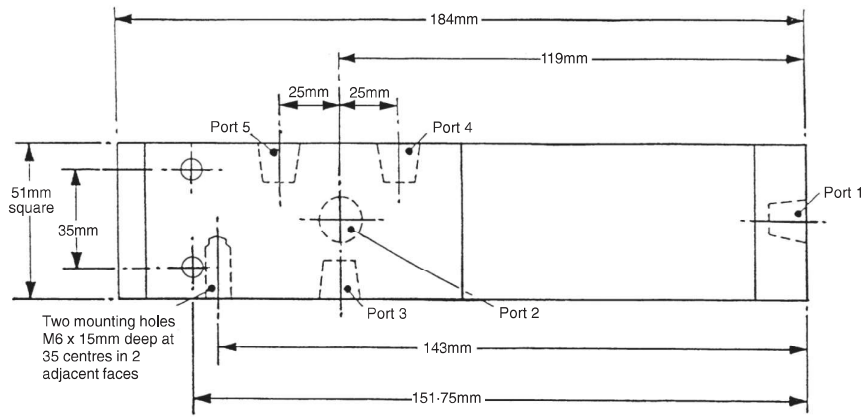
The valve slide (which can be supplied either normally closed or normally open) has a 'block before bleed' action. In a normally closed valve, for example, this means that the tank port is isolated before pressure and service ports are interconnected.

The valve body has a fourth connection (port 2) for a pressure gauge. If this port is not used, it must be sealed with a 1/4" NPT plug (not supplied with the valve).

Construction materials, predominantly 316 stainless steel and CA104 aluminium bronze with seals of fluoroelastomers and PTFE materials, ensure high corrosion resistance and comply with NACE Standard MR-01-75 (latest revision as applicable).

Operating parameters

Working pressure	690 bar (10,000 psi) max.
Pilot pressure – minimum	103 bar (1,500 psi).
Pilot pressure – maximum	690 bar (10,000 psi).
Operating media	Mineral oils, water, water-glycol mixtures.
Recommended filtration	25 micron.
Connections	1/4" NPTF all ports.
Flow rate, nominal	27 litres/min (6 imp galls/min).
Pressure drop	See performance curve.
Working temperature – standard	-20°C to + 130°C.
Working temperature – arctic	Available on request.

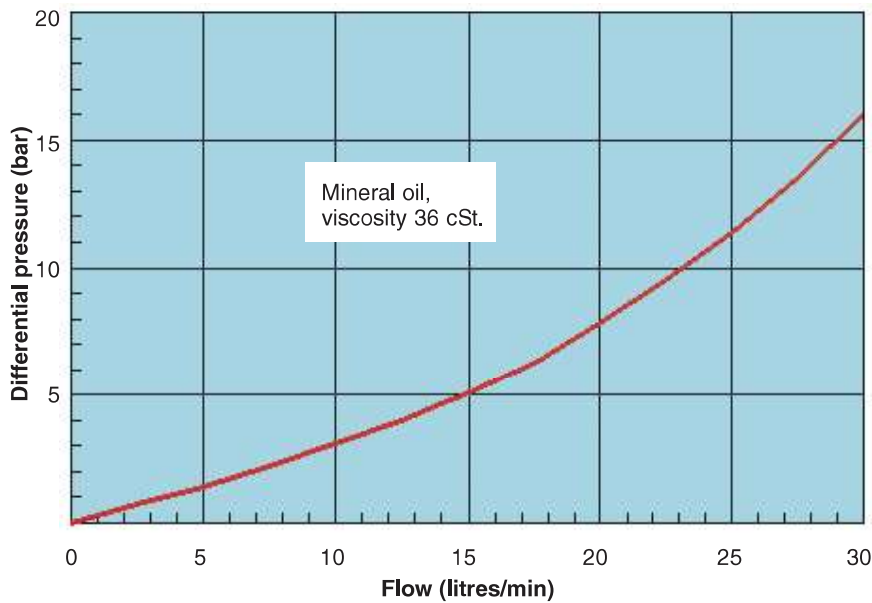


Drawing giving dimensions

Weight: 3kg

Port	Valve 3100	Valve 3105
Port 1	Pilot	Pilot
Port 2	Gauge	Gauge
Port 3	Service	Service
Port 4	Supply	Tank
Port 5	Tank	Supply

Port assignments



Performance curve



Marshalsea Hydraulics Limited
 Marshalsea House
 Venture Way
 Priorswood Industrial Estate
 Taunton
 Somerset TA2 8DE
 United Kingdom

Tel: 01823 331081
 (+44 1823 331081)
 Fax: 01823 323382
 (+44 1823 323382)

E-mail info@marshalsea.co.uk

www.marshalsea.co.uk